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Monitoring Air Operators or Aviation Maintenance Repair Facilities During Periods of Growth or Major Change

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The purpose of this summary is to identify similarities between monitoring growth and changes in both air operators and aviation maintenance repair facilities. A growth model was developed by the FAA and published as Flight Standards Joint Handbook Bulletin for Airworthiness (HBAW 98-21) and Air Transportation (HBAT 98-36), Monitoring Operators During Periods of Growth or Major Change, dated 12-17-98. This growth model is a tool to assist aviation safety inspectors in managing their assigned certificates, including deploying inspector resources more effectively in response to rapid growth or other such significant changes.

The growth model is a "system", consisting of an operator's growth plan and an evaluation of that plan by FAA principal aviation safety inspectors (ASI) and other appropriate personnel. The FAA evaluation of that plan is based on four growth factors:

1. Change in Fleet Composition, Size, or Utilization.
2. Change in the Air Carrier's Support.
3. Changes in Management.
4. Operational Change.

The first growth factor, Change in Fleet Composition, Size, or Utilization, would not initially appear to identify issues relevant to maintenance repair facilities. However, this factor when used with changes to the repair station ratings, such as addition of authorizations does describe elements, which could be associated to repair station growth thereby making this factor applicable.

Additionally, changes in ratings normally require equipment, administrative support, documentation, personnel, and training. Within the elements, topics discussed are spare parts, maintenance planning, manuals, maintenance personnel, and equipment. These elements and topics also have a direct relation to repair facilities.

The second growth factor, Change in the Air Carrier's Support, also has a direct relationship to repair facilities. Elements discussed are contract maintenance, quality assurance oversight, and the air carrier's own maintenance. Within the elements, topics discussed include outsourced vendors, quality audits, and adequacy of equipment and maintenance personnel. Outsourcing is particularly important, since many repair facilities sub-contract to non-certificated entities to perform maintenance tasks. The number and effectiveness of quality audits must provide quality assurance personnel adequate time to review reports prior to signing contracts.

Changes in Management, the third growth factor, elaborates on the qualifications of key management personnel, alerting inspectors to monitor changes in management personnel from individuals who are qualified and experienced in aviation to others who may be more oriented toward marketing or finance. In addition, reference is made to the NTSB Corporate Culture Checklist, a tool to evaluate an air carrier's philosophy or corporate culture (profits first, quality first, and long-term outlook). This growth factor also includes a comparison to industry standards regarding wages, morale, overtime, sick leave, turnover rate, etc.

The final growth factor, Operational Change, describes route structure and types of service. Elements discussed include international vs. domestic, contracts, facilities, equipment, and training. Topics include experience, manuals, operations specifications, etc. This growth factor evaluation will be very important as global harmonization initiatives increase, such as Bilateral Aviation Safety Agreements (BASA) and associated Maintenance Implementation Procedures (MIP). Therefore, these elements apply to repair facilities.

The growth model and associated four growth factors "system" indicate what types of changes should trigger closer scrutiny by the inspector and depict what an operator requires to operate safely through periods of growth or change. The growth model can be used to monitor and evaluate any organization undergoing the dynamic changes taking place in the entire aviation community.